

Table S3. The dates of measurements, thickness of snow, slush, total ice, white ice, and black ice, averaged over 22 stations and r.m.s., and under ice irradiance $E_a(z)$, maximal and average from 8 a.m. to 8 p.m. in spring in different years. Dash - no data.

Dates	Snow, cm		Slush, cm		Total ice, cm		White ice, cm		Black ice, cm		$E_a(z)$, W/m ²	
	Avg	r.m.s.	Avg	r.m.s.	Avg	r.m.s.	Avg	r.m.s.	Avg	r.m.s.	Max	Avg
13.04.1995	10	3	0	0	68	2	-	-	-	-	4	2
23.04.1995	0	0	0	0	44	1	-	-	-	-	90	49
19.04.1996	9	5	0	0	78	4	-	-	-	-	10	5
25.04.1996	1	1	0	0	73	5	-	-	-	-	70	42
13.04.1997	3	2	0	0	64	2	21	4	44	5	2	1
27.04.1997	2	0	0	0	60	2	19	4	41	5	49	14
28.04.1998	1	1	0	0	65	4	-	-	-	-	61	38
04.05.1998	2	1	0	0	43	3	-	-	-	-	162	77
11.04.1999	1	0	0	0	67	3	4	4	63	5	69	37
24.04.1999	0	0	0	0	36	5	0	0	36	5	180	87
13.04.2000	0	0	4	4	60	2	20	5	35	2	32	18
24.04.2000	0	0	0	0	40	3	13	5	28	3	155	54
15.04.2002	0	0	0	0	60	3	25	3	35	5	39	12
23.04.2002	0	0	0	0	56	3	21	4	35	5	43	25
20.04.2003	1	0	0	0	65	3	27	3	37	2	48	31
26.04.2003	1	0	0	0	59	4	23	4	35	3	26	11
18.04.2004	0	0	2	2	62	2	26	3	36	4	38	20
28.04.2004	0	0	4	3	49	2	16	3	32	4	102	39
17.04.2005	0	0	0	0	50	4	28	8	22	6	67	30
25.04.2005	0	0	0	0	48	4	26	6	22	6	52	26
18.04.2006	2	1	0	0	51	4	20	3	31	6	128	47
27.04.2006	0	0	0	0	38	4	9	2	29	5	179	121
14.04.2007	5	1	0	0	40	2	6	1	34	1	38.6	17
19.04.2007	0	0	0	0	29	2	0	0	29	1	397	159
15.04.2008	7	2	0	0	61	4	22	3	39	2	3	1
20.04.2008	1.5	0	0	0	61	3	22	3	39	2	21	8
23.04.2009	3	2	9	1	59	2	15	5	36	5	74	30
28.04.2009	0	0	5	1	45	2	7	3	33	4	119	62
18.04.2010	0	0	2	1	36	2	9	4	27	4	184	80
17.04.2011	0.5	0	11	3	59	7	5	2	43	4	122	72
21.04.2011	1.5	0	3	3	49	3	5	2	41	3	97	29
13.04.2012	9	1	9	2	62	4	40	2	13	1	3	1
23.04.2012	2	1	2	1	46	2	31	2	13	1	48	13
21.04.2013	0	0	0	0	39	6	5	1	34	1	238	87
23.04.2013	0	0	0	0	35	1	2	1	33	1	242	118
26.03.2014	1	1	0	0	40	1	10	1	30	1	97	63
31.03.2014	2	2	0	0	38	1	9	1	29	1	4	2
11.04.2015	1	0	5	2	45	3	16	2	23	2	106	44
15.04.2015	0.5	0	3	1	38	3	13	2	22	2	132	52
9.04.2016	0	0	0	0	49	2	2	1	47	2	188	53
13.04.2016	0	0	0	0	49	2	4	1	45	2	156	76
31.03.2017	8	2	0	0	59	2	32	4	27	5	6	2
19.04.2018	2	1	0	0	48	1	21	1	27	1	65	31
29.03.2020	2	1	0	0	40	3	13	2	27	2	99	47
5.04.2020	2	1	0	0	40	3	13	2	27	2	64	21